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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/666,843

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William E. Sobel

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EXAMINER

LASHLEY, LAUREL L

ART UNIT

PAPER NUMBER

2132

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/666,843	<b>Applicant(s)</b> SOBEL, WILLIAM E.	
	<b>Examiner</b> LAUREL LASHLEY	<b>Art Unit</b> 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-14 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-14 and 16-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/01/2008 has been entered. Claims 1-7, 9-14 and 16-22 are still pending.

### ***Response to Arguments***

2. Applicant's arguments filed 05/01/2008 have been fully considered but they are not persuasive. It is Applicant's assertion that the amendment recitation "the behavioral pattern of packets comprises a behavioral password that includes a prescribed sequence of one or more of the following: connection requests, probes, and scans" is not taught by either Kalajan or Teraoka. The Examiner respectfully disagrees. Kalajan disclose password systems as a means for validation of communication packets (see column 4, lines 1-15). However Teraoka specifically identifies a source-host authenticator within in the packet header which is used for authentication purposes. Teraoka's source-host authenticator contains a predetermined secret key (Ks) which is well known in the art to be equivalent to a password (see column 7, line 47). Furthermore, the source-host authenticator is calculated by computing a checksum (which is also well known in the art to ensure data integrity and error detection) and the secret key of the data packet (see column 7, lines 59-64).

Therefore, in response to Applicant's argument that "the use of sequence numbers to ensure packets are processed in order, as taught by Kalajan and Teraoka, is not the same as a "behavioral password", since a password is kept secret and the sequence order as taught by

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Kalajan and Teraoka is known by all, and in any event packet sequence number order is not the same as a "prescribed sequence" of connection requests, probes, and/or scans, the Examiner asserts that packet sequence is ensured by the checksum (which again ensure data integrity and error detection) and the secret key (i.e. password) is unknown since it is a "secret". The Examiner believes Kalajan and Teraoka to still be relevant to Applicant's claimed invention. Furthermore, the Examiner respectfully asks the Applicant to define what is meant by "prescribed sequence" since it is not the same as packet sequence number order (please see below). Therefore the Examiner believes this disclosure meets Applicant's claim limitation and for at least these reasons the Examiner maintains the rejection of claims 1-7, 9-14 and 16-22.

***Claim Rejections - 35 USC § 112***

3. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "prescribed sequence" in claims 1, 14 and 16, according to Applicant is not the same as packet sequence number order, while the accepted meaning is that "prescribed sequence" and "packet sequence number" is one and the same. The term is indefinite because the specification does not clearly redefine the term.

4. To expedite prosecution, the Examiner has treated the term "prescribed sequence" as being the same as "packet sequence number order" which is consistent with Applicant's original disclosure.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-7, 9 – 14, and 16 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalajan in US Patent No. 6202156 (hereinafter US '156) further in view of Teraoka in US Patent No. 6009528 (hereinafter US '528).

6. For claim 1, and similar independent claims 14 and 16, US '156 discloses:

A method for network security comprising:

receiving a request from a remote address at a host;

observing a behavioral pattern of packets associated with the request;

authenticating the remote address based on the behavioral pattern of the packets associated with the request; and

enabling access to the host by the remote address for a configurable time period if the remote address is authenticated; (see Abstract; Figure 1; column 1, lines 35 – 63, 65 – column 2, lines 1 – 10, 29 – 34, 37 – 43, 50 – 58: process of validating access request..., 60 – 65: time period...; column 6, lines 47 – 51: packet observation...) *but does not expressly disclose* wherein the authentication is based at least in part a determination that the observed behavioral pattern of the packets matches a pre-defined packet sequence and wherein the behavioral pattern of packets comprises a behavioral password that includes a prescribed sequence of one or more of the following: connection requests, probes, and scans (Kalajan et al discloses that password systems as a means for validation of communication packets (see column 4, lines 1-15).

Teraoka however in US '528 teaches wherein the authentication is based at least in part a determination that the observed behavioral pattern of the packets matches a pre-defined

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packet sequence (see Abstract; column 7, lines 43 – 46: authentication information is in the packet header; column 7, lines 53 – 58: packet header contents; column 9, lines 16 – 23: packet header authentication).

Teraoka further discloses in US '528 wherein the behavioral pattern of packets comprises a behavioral password that includes a prescribed sequence of one or more of the following: connection requests, probes, and scans (see column 7, lines 53-58: source-host authenticator includes predetermined secret key (see column 7, line 47, 60-65)).

Kalajan and Teraoka are analogous art because they are from the same problem solving areas (enhancing the security of communication on a network). At the time of the invention, it would have been obvious to a skilled artisan to modify the method of packet authentication of Kalajan such “that it would be based at least in part a determination that the observed behavioral pattern of the packets matches a pre-defined packet sequence; wherein the behavioral pattern of packets comprises a behavioral password that includes a prescribed sequence of one or more of the following: connection requests, probes, and scans” such as packet header authentication as in Teraoka. The motivation for doing so would have been to enhance network security.

For claim 2, and similar claim 17, US '156 teaches:

A method for preventing network discovery of a system services configuration as recited in claim 1 further including preventing a response from being sent to the remote address. (see column 1, lines 36 – 37; column 3, lines 17 – 20)

For claim 3, and similar claim 18, US '156 discloses:

A method for preventing network discovery of a system services configuration as recited in claim 1 wherein receiving a request from a remote address at the host further includes receiving a probe. (see column 2, lines 42 – 43; column 4, lines 41 – 43, 58 – 61)

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For claim 4, and similar claim 19 US '156 discloses:

A method for preventing network discovery of a system services configuration as recited in claim 1 wherein observing a pattern associated with the request further includes recording data received at the host. (see column 4, lines 33: firewall; column 6, lines 47 – 56)

For claim 5, and similar claim 20, US '156 teaches:

A method for preventing network discovery of a system services configuration as recited in claim 1 wherein observing a pattern associated with the request further includes matching the pattern to a list. (see column 4, lines 1 – 11)

For claim 6, US '156 teaches:

A method for preventing network discovery of a system services configuration as recited in claim 1 wherein observing a pattern associated with the request further includes recording a sequence. (see column 4, lines 1 – 11, 35 – 39 and 54 -61)

For claim 7, and similar claim 21 US '156 teaches:

A method for preventing network discovery of a system services configuration as recited in claim 1 wherein authenticating the remote address based on the pattern associated with the request further includes comparing the pattern to a list. (see column 4, lines 1 – 11 and 54 – 61)

For claim 9, and similar claim 22 US '156 discloses:

A method for preventing network discovery of a system services configuration as recited in claim 1 wherein authenticating the remote address based on the pattern associated with the request further includes preventing a response being sent to the remote address if the remote address fails to authenticate. (see column 4, lines 62 – 65: blocked by firewall; column 5, lines 53 – 56)

For claim 10, US '156 teaches:

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A method for preventing network discovery of a system services configuration as recited in claim 1 wherein authenticating the remote address based on the pattern associated with the request further includes denying access to the host if the remote address fails to authenticate. (see column 5, lines 53 – 56 and 65 - column 6, lines 1-7)

For claim 11, US '156 teaches:

A method for preventing network discovery of a system services configuration as recited in claim 1 wherein authenticating the remote address based on the pattern associated with the request further includes sending a message to the remote address if the request fails to authenticate. (see column 5, lines 53 – 56 and 65 - column 6, lines 1-7)

For claim 12, US '156 discloses:

A method for preventing network discovery of a system services configuration as recited in claim 1 wherein enabling access to the host by the remote address further includes providing access for a configurable amount of time. (see column 2,, lines 61 – 64 and column 4, line 66 – column 5, lines 1 – 4)

For claim 13, US '156 discloses:

A method for preventing network discovery of a system services configuration as recited in claim 1 wherein enabling access to the host by the remote address further includes implementing a handshake between the remote address and the host. (see column 4, lines 54 – 58)

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAUREL LASHLEY whose telephone number is (571)272-0693. The examiner can normally be reached on Monday - Thursday, alt Fridays btw 7:30 am & 5 pm.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron, Jr. can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laurel Lashley  
Examiner  
Art Unit 2132

/L. L./  
17 July 2008

/Gilberto Barron Jr/  
Supervisory Patent Examiner, Art Unit 2132